



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named  
Inventor : Lucien A. Couvillon, Jr.  
  
Appln. No. : 10/645,814  
  
Filed : August 21, 2003  
  
For : EXTERNAL COUNTERPULSATION  
DEVICE USING ELECTROACTIVE  
POLYMER ACTUATORS  
  
Docket No.: S13.12-0146

Group Art Unit: ---

Examiner: ---

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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4<sup>th</sup> DAY OF December 2003  
*Joseph R. Kelly*  
PATENT ATTORNEY

Sir:

The patents or publications listed on the enclosed PTO Form-1449 are submitted pursuant to 37 C.F.R. § 1.97. Copies of the patents or publications cited are enclosed, except as waived by the Official Gazette notice of August 5, 2003 regarding copies of US Patents and Publications.

TIME OF FILING

The information disclosure statement is being filed with the application or within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. In accordance with 37 C.F.R. § 1.97(b), no statement or fee is required.

METHOD OF PAYMENT

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The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123. A duplicate copy of this communication is enclosed.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

Joseph R. Kelly, Reg. No. 34,847  
Suite 1600 - International Centre  
900 Second Avenue South  
Minneapolis, Minnesota 55402-3319  
Phone: (612) 334-3222  
Fax: (612) 334-3312

JRK:slg



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|---|----------------------------------|--------------------------|
| FORM PTO-1449   | Atty. Docket No.:<br>S13.12-0146 | Appl. No.:<br>10/645,814 |
| LIST OF PATENTS AND PUBLICATIONS FOR<br>APPLICANT'S INFORMATION<br>DISCLOSURE STATEMENT | First Named Inventor:            |                          |
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## U.S. PATENT DOCUMENTS

| Examiner Initial | Document No. | Date     | Name           | Class | Sub Class | Filing Date If Appropriate |
|------------------|--------------|----------|----------------|-------|-----------|----------------------------|
| AA               | 3,455,298    | 07/15/69 | G. L. Anstadt  |       |           |                            |
| AB               | 4,014,318    | 03/29/77 | Dockum et al.  | 128   | 1         |                            |
| AC               | 4,192,293    | 03/11/80 | Asrican        | 128   | 1         |                            |
| AD               | 4,302,854    | 12/01/81 | Runge          | 3     | 1.7       |                            |
| AE               | 4,304,225    | 12/08/81 | Freeman        | 128   | 60        |                            |
| AF               | 4,448,190    | 05/15/84 | Freeman        | 128   | 60        |                            |
| AG               | 4,506,658    | 03/26/85 | Casile         | 128   | 1         |                            |
| AH               | 4,522,698    | 06/11/85 | Maget          | 204   | 301       |                            |
| AI               | 4,621,617    | 11/11/86 | Sharma         | 128   | 1         |                            |
| AJ               | 4,690,134    | 09/01/87 | Snyders        | 128   | 64        |                            |
| AK               | 4,925,443    | 05/15/90 | Heilman et al. | 600   | 16        |                            |

## FOREIGN PATENT DOCUMENTS

|    | Document No. | Date | Country | Class | Sub Class | Translation Yes No |
|----|--------------|------|---------|-------|-----------|--------------------|
| AL |              |      |         |       |           |                    |
| AM |              |      |         |       |           |                    |
| AN |              |      |         |       |           |                    |

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

|    |   |
|----|---|
| AO | Enhanced External Counterpulsation, Lem Leslie, Mahmoon Shahid, Asian Cardiovascular & Thoracic Annals (Singapore) March 2003 pp. 92-94.                |
| AP | Enhanced External Counterpulsation for Refractory Angina Pectoris, Sinvhal, R.M. Gowda, R.M. Khan, I.A. Heart London, 2003 Vol. 89, Part 8, pp. 830-833 |
| AQ | Patent Application No. 10/262,829   |

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|---------------------|-----------------|----------|----------------|-------|--------------|-------------------------------|
| AA                  | 4,957,477       | 09/18/90 | Lundback       | 600   | 16           |                               |
| AB                  | 5,098,369       | 03/24/92 | Heilman et al. | 600   | 16           |                               |
| AC                  | 5,131,905       | 07/21/92 | Grooters       | 600   | 16           |                               |
| AD                  | 5,169,381       | 12/08/92 | Snyders        | 600   | 16           |                               |
| AE                  | 5,250,167       | 10/05/93 | Adolf et al.   | 204   | 299          |                               |
| AF                  | 5,383,840       | 01/24/95 | Heilman et al. | 600   | 17           |                               |
| AG                  | 5,389,222       | 02/14/95 | Shahinpoor     | 204   | 299.2        |                               |
| AH                  | 5,554,103       | 09/10/96 | Zheng et al.   | 601   | 152          |                               |
| AI                  | 5,558,617       | 09/24/96 | Heilman et al. | 600   | 16           |                               |
| AJ                  | 5,769,800       | 06/23/98 | Gelfand et al. | 601   | 151          |                               |
| AK                  | 6,010,471       | 01/04/00 | Ben-noon       | 601   | 152          |                               |

FOREIGN PATENT DOCUMENTS

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|----|--------------|------|---------|-------|--------------|-----------------------|
| AL |              |      |         |       |              |                       |
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|---------------------|-----------------|----------|-------------------|-------|--------------|-------------------------------|
| AA                  | 6,084,321       | 07/04/00 | Hunter et al.     | 310   | 20           |                               |
| AB                  | 6,109,852       | 08/29/00 | Shahinpoor et al. | 414   | 1            |                               |
| AC                  | 6,179,793       | 01/30/01 | Rothman et al.    | 601   | 44           |                               |
| AD                  | 6,249,076       | 06/19/01 | Madden et al.     | 310   | 363          |                               |
| AE                  | 6,261,250       | 07/17/01 | Phillips          | 301   | 23           |                               |
| AF                  | 6,376,971       | 04/23/02 | Pelrine et al.    | 310   | 363          |                               |
| AG                  | 6,464,655       | 10/15/02 | Shahinpoor        | 601   | 153          |                               |
| AH                  | 6,514,237       | 02/04/03 | Maseda            | 604   | 533          |                               |
| AI                  | 6,545,384       | 04/08/03 | Pelrine et al.    | 310   | 309          |                               |
| AJ                  | 6,572,621       | 06/03/03 | Zheng et al.      | 606   | 64           |                               |
| AK                  | 6,589,267       | 07/08/03 | Hui               | 606   | 202          |                               |

FOREIGN PATENT DOCUMENTS

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|----|--------------|------|---------|-------|--------------|-----------------------|
| AL |              |      |         |       |              |                       |
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|---------------------|-----------------|----------|----------|-------|--------------|-------------------------------|
| AA                  | 6,592,502       | 07/15/03 | Phillips | 482   | 143          |                               |
| AB                  |                 |          |          |       |              |                               |
| AC                  |                 |          |          |       |              |                               |
| AD                  |                 |          |          |       |              |                               |
| AE                  |                 |          |          |       |              |                               |
| AF                  |                 |          |          |       |              |                               |
| AG                  |                 |          |          |       |              |                               |
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